WHAT IS CLAIMED IS:

1. A purified nucleic acid comprising:

a) a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335;

b) at least 10 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335;

c) at least 15 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335;

d) the coding sequence of a sequence selected from the group consisting of SEQ ID NOs. 24-3883;

e) the full coding sequences of a sequence selected from the group consisting of SEQ ID NOs. 1339-2059, wherein the full coding sequence comprises the sequence encoding a signal peptide and the sequence encoding a mature protein;

f) a contiguous span of a sequence selected from the group consisting of SEQ ID NOs. 1339-2059 which encodes a mature protein;

g) a contiguous span of a sequence selected from the group consisting of SEQ ID NOs. 24-383 and 1339-2059 which encodes a signal peptide;

h) a nucleic acid sequence encoding a polypeptide comprising a sequence selected from the group consisting of SEQ ID NOs. 3884-7743;

i) a nucleic acid sequence encoding a polypeptide comprising a sequence selected from the group consisting of SEQ ID NOs. 5199-5919;

j) a nucleic acid sequence encoding a polypeptide comprising a mature protein included in a sequence selected from the group consisting of SEQ ID NOs. 5199-5919;

k) a nucleic acid sequence encoding a polypeptide comprising a signal peptide included in a sequence selected from the group consisting of the sequences of SEQ ID NOs. 3884-4243 and 5199-5919; or

l) a nucleic acid sequence which hybridizes under stringent conditions to a sequence comprising at least 15 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335.

2. A purified or isolated polypeptide comprising:

a) a sequence selected from the group consisting of SEQ ID NOs. 3884-7743;

b) a sequence selected from the group consisting of SEQ ID NOs. 5199-5919;

c) a mature protein of a polypeptide selected from the group consisting of SEQ ID NOs. 5199-5919;

d) a signal peptide of a sequence selected from the group consisting of SEQ ID NOs. 3884-4243 and 5199-5919; or

e) at least 10 consecutive amino acids of a sequence selected from the group consisting of SEQ ID NOs. 3884-7743.

3. A method of making a cDNA comprising the steps of:

a) contacting a collection of mRNA molecules from human cells with a primer comprising at least 15 consecutive nucleotides of a sequence selected from the group consisting of the sequences complementary to SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335;

b) hybridizing said primer to an mRNA in said collection that encodes said protein;

c) reverse transcribing said hybridized primer to make a first cDNA strand from said mRNA;

d) making a second cDNA strand complementary to said first cDNA strand; and

e) isolating the resulting cDNA encoding said protein comprising said first cDNA strand and said second cDNA strand.

4. A purified cDNA obtained by the method of Claim 3.

5. The cDNA of Claim 4 wherein said cDNA encodes at least a portion of a human polypeptide.

6. A method of making a cDNA comprising the steps of:

a) contacting a cDNA collection with a detectable probe comprising at least 15 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and the sequences complementary to SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 under conditions which permit said probe to hybridize to said cDNA;

b) identifying a cDNA which hybridizes to said detectable probe; and

c) isolating said cDNA which hybridizes to said probe.

7. A purified cDNA obtained by the method of Claim 6.

8. The cDNA of Claim 7 wherein said cDNA encodes at least a portion of a human polypeptide.

9. A method of making a cDNA comprising the steps of:

a) contacting a collection of mRNA molecules from human cells with a first primer capable of hybridizing to the polyA tail of said mRNA;

b) hybridizing said first primer to said polyA tail;

c) reverse transcribing said mRNA to make a first cDNA strand; and

d) making a second cDNA strand complementary to said first cDNA strand using at least one primer comprising at least 15 consecutive nucleotides of a sequence

selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335.

10. A purified cDNA obtained by the method of Claim 9.

11. The cDNA of Claim 10 wherein said cDNA encodes at least a portion of a human polypeptide.

12. The method of Claim 9, wherein the second cDNA strand is made by:

a) contacting said first cDNA strand with a second primer comprising at least 15 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and a third primer which sequence is fully included within the sequence of said first primer;

b) performing a first polymerase chain reaction with said second and third primers to generate a second cDNA strand;

13. A purified cDNA obtainable by the method of Claim 12.

14. The cDNA of Claim 13 wherein said cDNA encodes at least a portion of a human polypeptide.

15. The method of Claim 9, wherein the second cDNA strand is made by:

a) contacting said first cDNA strand with a second primer comprising at least 15 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and a third primer which sequence is fully included within the sequence of said first primer;

b) performing a first polymerase chain reaction with said second and third primers to generate a first PCR product;

c) contacting said first PCR product with a fourth primer comprising at least 15 consecutive nucleotides of said sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335, and a fifth primer which

sequence is fully included within the sequence of said third primer, wherein said fourth and fifth primers hybridize to sequences within the first said PCR product, and;

d) performing a second polymerase chain reaction with the fourth and fifth primers, thereby generating a second PCR product.

16. A purified cDNA obtained by the method of Claim 15.

17. The cDNA of Claim 16 wherein said cDNA encodes at least a portion of a human polypeptide.

18. The method of Claim 9 wherein the second cDNA strand is made by:

a) contacting said first cDNA strand with a second primer comprising at least 15 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335;

b) hybridizing said second primer to said first strand cDNA; and

c) extending said hybridized second primer to generate said second cDNA strand.

19. A purified cDNA obtained by the method of Claim 18.

20. The cDNA of Claim 19, wherein said cDNA encodes at least a portion of a human polypeptide.

21. A method of making a polypeptide comprising the steps of:

a) obtaining a cDNA which encodes a polypeptide encoded by a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NOs. 24-3883 or a cDNA which encodes a polypeptide comprising at least 10 consecutive amino acids of a polypeptide encoded by a sequence selected from the group consisting of SEQ ID NOs. 24-3883;

b) inserting said cDNA in an expression vector such that said cDNA is operably linked to a promoter;

c) introducing said expression vector into a host cell whereby said host cell produces the protein encoded by said cDNA; and

d) isolating said protein.

22. An isolated protein obtainable by the method of Claim 21.

23. A method of obtaining a promoter DNA comprising the steps of:

a) obtaining genomic DNA located upstream of a nucleic acid comprising a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and the sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335;

b) screening the upstream genomic DNA to identify a promoter capable of directing transcription initiation; and

c) isolating the upstream genomic DNA comprising the promoter.

24. The method of Claim 23, wherein said obtaining step comprises walking from genomic DNA comprising a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and the sequences complementary to SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335.

25. The method of Claim 24, wherein said screening step comprises inserting genomic DNA located upstream of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and the sequences complementary to SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 into a promoter reporter vector.

26. The method of Claim 24, wherein said screening step comprises identifying motifs in genomic DNA located upstream of a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and the sequences complementary to SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 which are transcription factor binding sites or transcription start sites.

27. An isolated promoter obtainable by the method of Claim 23.

28. In an array of discrete ESTs or fragments thereof of at least 15 nucleotides in length, the improvement comprising inclusion in said array of at least one sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335, the sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and fragments comprising at least 15 consecutive nucleotides of said sequence.

29. The array of Claim 28 including therein at least two sequences selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335, the sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335, and fragments comprising at least 15 consecutive nucleotides of said sequences.

30. The array of Claim 28 including therein at least five sequences selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335, the sequences complementary to the sequences of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and fragments comprising at least 15 consecutive nucleotides of said sequences.

31. An enriched population of recombinant nucleic acids, said recombinant nucleic acids comprising an insert nucleic acid and a backbone nucleic acid, wherein at least 5% of said insert nucleic acids in said population comprise a sequence selected from the group consisting of SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335 and the sequences complementary to SEQ ID NOs. 24-3883 and SEQ ID NOs. 7744-19335.

32. A purified or isolated antibody or purified antibody composition that:

a) specifically binds to a polypeptide comprising a sequence selected from the group consisting of SEQ ID NOs. 3884-7743, wherein said antibody is polyclonal or monoclonal;

b) specifically binds to a polypeptide comprising at least 10 consecutive amino acids of a sequence selected from the group consisting of SEQ ID NOs. 3884-7743, wherein said antibody is polyclonal or monoclonal; or

c) selectively binds to an epitope-containing fragment of a polypeptide comprising a contiguous span of at least 8 amino acids of any of SEQ ID NOs. 3884-7743, wherein said antibody is polyclonal or monoclonal.

33. A computer readable medium having stored thereon a sequence selected from the group consisting of a nucleic acid code of SEQ ID NOs. 24-3883 and 7744-19335 and a polypeptide code of SEQ ID NOs. 3884-7743.

34. A computer system comprising a processor and a data storage device wherein said data storage device has stored thereon a sequence selected from the group consisting of a nucleic acid code of SEQID NOs. 24-3883 and 7744-19335 and a polypeptide code of SEQ ID NOs. 3884-7743.

35. The computer system of Claim 34 further comprising a sequence comparer and a data storage device having reference sequences stored thereon.

36. The computer system of Claim 35 wherein said sequence comparer comprises a computer program which indicates polymorphisms.

37. The computer system of Claim 34 further comprising an identifier which identifies features in said sequence.

38. A method for comparing a first sequence to a reference sequence wherein said first sequence is selected from the group consisting of a nucleic acid code of SEQID NOs. 24-3883 and 7744-19335 and a polypeptide code of SEQ ID NOs. 3884-7743 comprising the steps of:

a) reading said first sequence and said reference sequence through use of a computer program which compares sequences; and

b) determining differences between said first sequence and said reference sequence with said computer program.

39. The method of Claim 38, wherein said step of determining differences between the first sequence and the reference sequence comprises identifying polymorphisms.

40. A method for identifying a feature in a sequence selected from the group consisting of a nucleic acid code of SEQID NOs. 24-3883 and 7744-19335 and a polypeptide code of SEQ ID NOs. 3884-7743 comprising the steps of:

a) reading said sequence through the use of a computer program which identifies features in sequences; and

b) identifying features in said sequence with said computer program.

41. A vector comprising a nucleic acid according to Claim 1.

42. A host cell containing a nucleic acid of Claim 41.

43. A method of making a nucleic acid of Claim 1 comprising the steps of:

a) introducing said nucleic acid into a host cell such that said nucleic acid is present in multiple copies in each host cell; and

b) isolating said nucleic acid from said host cell.

44. A method of making a nucleic acid of Claim 1 comprising the step of sequentially linking together the nucleotides in said nucleic acid.

45. A method of making a polypeptide of Claim 2, wherein said polypeptide is 150 amino acids in length or less comprising the step of sequentially linking together the amino acids in said polypeptide.

46. A method of making a polypeptide of Claim 2, wherein said polypeptide is 120 amino acids in length or less comprising the step of sequentially linking together the amino acids in said polypeptide.

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